

REMARKS/ARGUMENTS

In the Office Action mailed March 30, 2007, claims 1 – 20 were rejected. In response, Applicants have amended claims 1, 4, 10, 16, and 18 – 20. Applicants hereby request reconsideration of the application in view of the amended claims and the below-provided remarks.

Claim Rejections under 35 U.S.C. 103

Claims 1, 2, and 4 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muthu (U.S. Pat. No. 6,507,159) in view of Iwauchi et al. (U.S. Pat. Publ. No. 2005/0117190 A1, hereinafter Iwauchi).

Claim 1

Claim 1 has been amended to particularly point out that the light system includes multiple light source assemblies with each light source assembly including different colored light sources, to particularly point out that light sources of the same color are driven at non-overlapping intervals, and to particularly point out that the drive signals are adjusted on a per-light source assembly basis and a per-light source basis. Support for the amendments is found, for example, at paragraphs [0005], [0012], [0023] – [0027], and Fig. 4 of Applicants' specification. Claim 1 as amended recites:

“A control system for a Light Emitting Diode (LED) based light system, comprising:
a plurality of light source assemblies, each light source assembly comprising a light source of a first color and a light source of a second color, ***the first and second colors being different;***
a plurality of feedback units for generating feedback signals representative of luminance and chrominance characteristics; and
a controller in signal communication with said plurality of feedback units configured to provide drive signals to the light source assemblies during respective non-overlapping intervals such that ***a light source of the first color*** in a ***first*** light source assembly and ***a light source of the first color*** in a ***second*** light source assembly are ***driven at non-overlapping intervals*** and such that a light source of the second color in the first light source assembly and a light source of the second color in the second light source assembly are driven at non-overlapping intervals and to ***adjust said drive signals on a per-light source assembly and a per-light source basis*** in response to feedback signals from said plurality of feedback units.” (emphasis added)

The Office action cites Muthu as teaching light sources, feedback units, and a controller but admits that Muthu fails to teach providing drive signals to light source assemblies during non-overlapping intervals. The Office action cites Iwauchi for teaching a controller that provides drive signals to the light source assemblies in respective non-overlapping intervals. Applicants assert that amended claim 1 is not rendered obvious from Muthu in view of Iwauchi because Iwauchi does not teach or suggest driving LEDs of the same color at non-overlapping intervals so that drive signals can be adjusted on a per-light source assembly and per-light source basis as recited in claim 1.

Iwauchi teaches that LEDs of different color are driven at non-overlapping intervals. With reference to Figs. 2 and 3a – 3C, Iwauchi teaches that all of the red LEDs are driven during a non-overlapping interval (e.g., time interval $t_2 - t_3$), all of the green LEDs are driven during a non-overlapping interval (e.g., time interval $t_3 - t_4$), and all of the blue LEDs are driven during a non-overlapping interval (e.g., time interval $t_4 - t_3$). For example, at paragraph [0057], Iwauchi teaches: “during the monitoring period, the red, green and blue LEDs are driven such that they emit light one type at a time in this order and such that, while one LED is turned on, the other two types or LEDs are turned off.” While the technique taught by Iwauchi yields color-specific feedback/drive signals, it does not differentiate between multiple LEDs of the same color. That is, Iwauchi makes no reference to differentiating between the feedback/drive signals of two red LEDs, two green LEDs, or two blue LEDs.

In contrast to the teaching of Iwauchi, claim 1 recites a system that drives LEDs of the same color at non-overlapping intervals so that the drive signals for LEDs of the same color can be separately adjusted to improve color uniformity and consistency across a light source that includes multiple light source assemblies. Because Iwauchi does not teach a system that drives LEDs of the same color at non-overlapping intervals and adjusts drive signals on a per-light source assembly and a per-light source basis as recited in claim 1, Applicants assert that a *prima facie* case of obviousness has not been established.

Independent Claims 10 and 16

Independent claims 10 and 16 have been amended to include similar limitations to claim 1. Although the language of claims 10 and 16 differs from the language of claim 1 and the scope of claims 10 and 16 should be interpreted

independently of claim 1, Applicants respectfully assert that the remarks provided above in regard to claim 1 apply also to claims 10 and 16.

Dependent Claims 2 – 9, 11 – 15, and 17 – 20

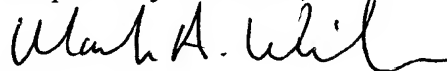
Claims 2 – 9 depend from claim 1, claims 11 – 15 depend from claim 10, and claims 17 – 20 depend from claim 16. Applicants assert that these claims are allowable at least based on an allowable base claim. Claims 4 and 18 – 20 have been amended to correspond to the amendments of the respective base claims.

Conclusion

Applicants respectfully request reconsideration of the claims in view of the amendments and the remarks made herein. A notice of allowance is earnestly solicited.

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Respectfully submitted,



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